



Custom Power Solar

# Custom Power Solar Inc

- Northern California's Premier Solar plus Storage plus EV Charger Design/Build and Monitoring Company

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# Custom Power Solar

- Specialists in Solar Power with Advanced Energy Storage (AES)
- Since 2012 solar-plus-storage solutions
- Solar power pioneers since 2004 – developers of thin silicon solar tech at Photon Energy Systems / Calisolar in Sunnyvale
- Solar Power Plants and AES Installation, Operation, and Maintenance

# Why Custom Power Solar?

- Experience in solar plus storage since 2004
- Rate model comparison tools – one page compares all
- Design, construction, and interconnection
- Flexible financing – from \$0 down to Power Purchase Agreements
- Always strive for best deal for customer – whether 3<sup>rd</sup> party or customer-owned

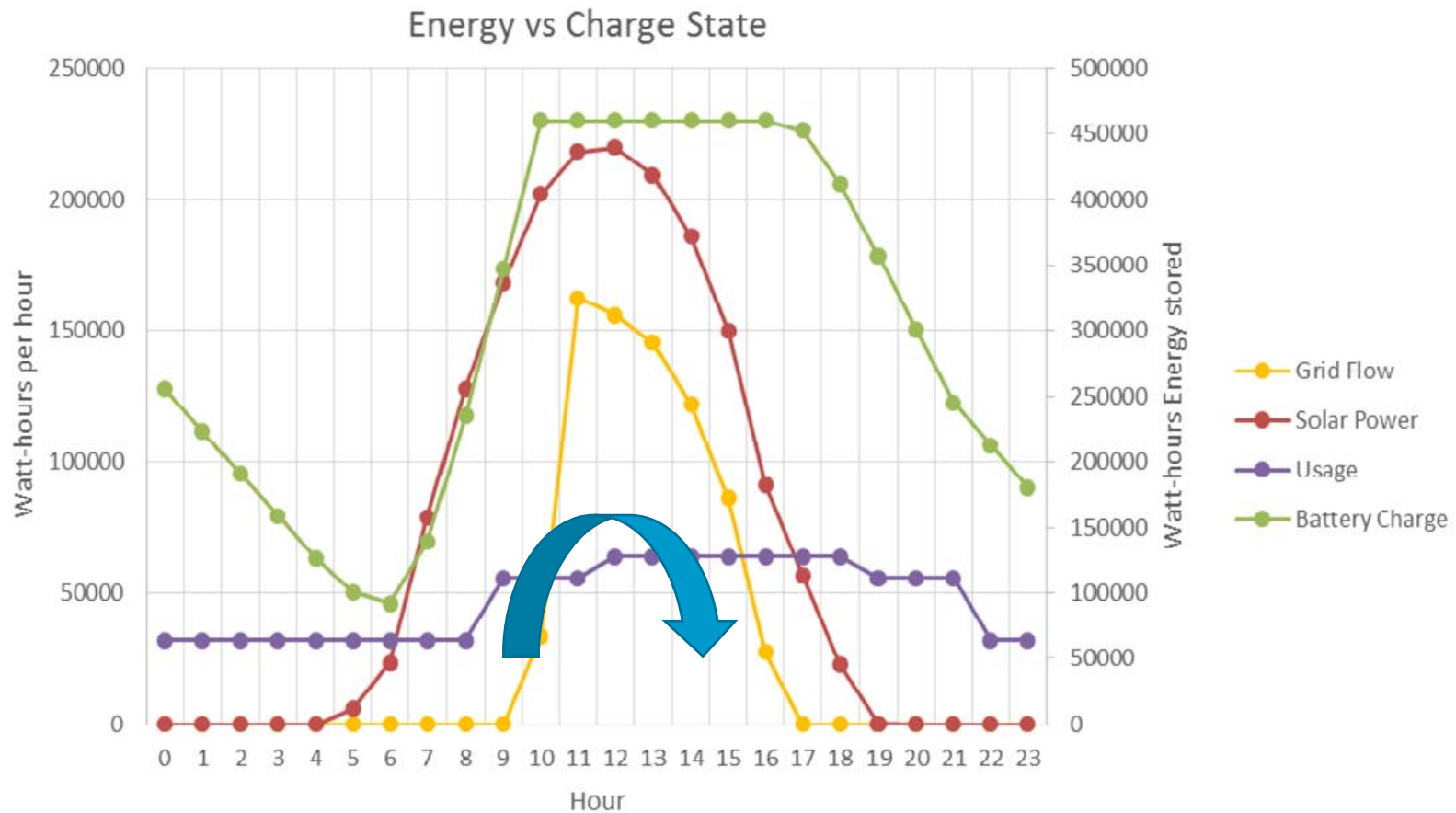
# Advantages of Solar+Storage

- Energy Security – power if grid fails
- Buffers fluctuations – clouds, rainy days
- Save solar power in battery energy storage in the morning
- All new systems required to have a smart inverter after September 6, 2017
- May be able to participate in advanced energy storage grid benefit programs with your smart inverter

# Solar+Storage Can Reduce Your Energy Bills

- Utility peak periods will be shifting to evening hours by 2018
- Advanced energy storage provides power in the afternoon and during evening peak rate periods
- Can get off high tiers for tiered rate-payers
- Can add value by selling at peak rates
- Reduces demand charges for commercial customers

# Solar Power with Storage



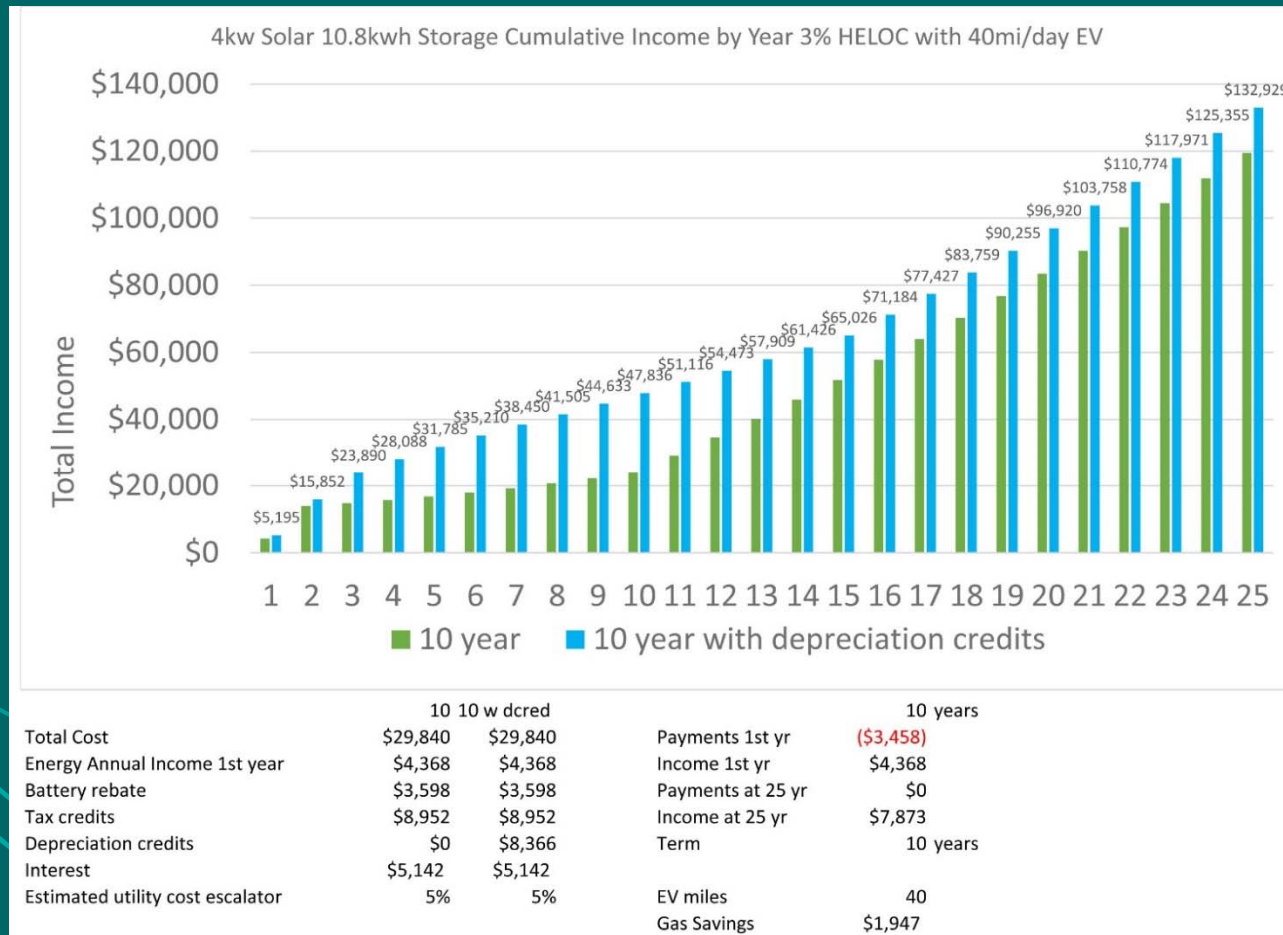
- Lower peak demand charges
- Arbitrage for greater savings
- Power when grid fails

# Cost Savings Residential



- Compare rates, costs, and benefits of solar+storage
- Can add EV use

# Cumulative Income Residential



Note: Recommend always seek tax information from your CPA or tax preparer



# Cost Savings Commercial

## Custom Power Solar

### Annual

|                              | A-6 TOU      | E-19R TOU   | A-1 TOU     | A-10 TOU    |
|------------------------------|--------------|-------------|-------------|-------------|
| Cost                         | \$87,795.36  | \$58,883.44 | \$80,332.76 | \$80,803.77 |
| Cost Est. with Solar         | -\$17,131.62 | -\$416.68   | -\$2,621.09 | \$22,718.33 |
| Cost Est. with Solar+Storage | -\$29,445.84 | -\$8,362.84 | -\$4,076.81 | \$20,779.55 |
| Improvement over solar only  | 14.03%       | 13.49%      | 1.81%       | 2.40%       |
| Cost Advantage batteries     | \$12,314.22  | \$7,946.16  | \$1,455.73  | \$1,938.78  |

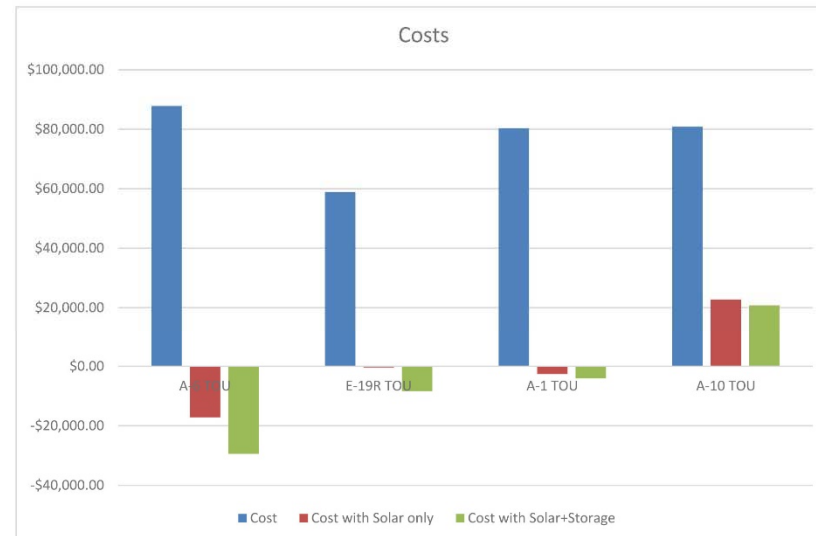
|                        |            |  |                 |  |
|------------------------|------------|--|-----------------|--|
| Total usage            | 365773 kwh |  |                 |  |
| Total solar            | 362432 kwh |  | 200 kw AC Solar |  |
| Surplus                | -3341 kwh  |  | 360 kwh Battery |  |
| Percent solar vs usage | 99.1%      |  |                 |  |

### Annual Demand Charges

|                              | A-6 TOU | E-19R TOU   | A-1 TOU | A-10 TOU    | Max Demand |
|------------------------------|---------|-------------|---------|-------------|------------|
| Cost                         |         | \$11,935.90 |         | \$29,112.83 | 73.26      |
| Cost Est. with Solar         |         | \$11,712.76 |         | \$26,514.87 | 73.26      |
| Cost Est. with Solar+Storage |         | \$11,735.45 |         | \$27,011.07 | 73.26      |

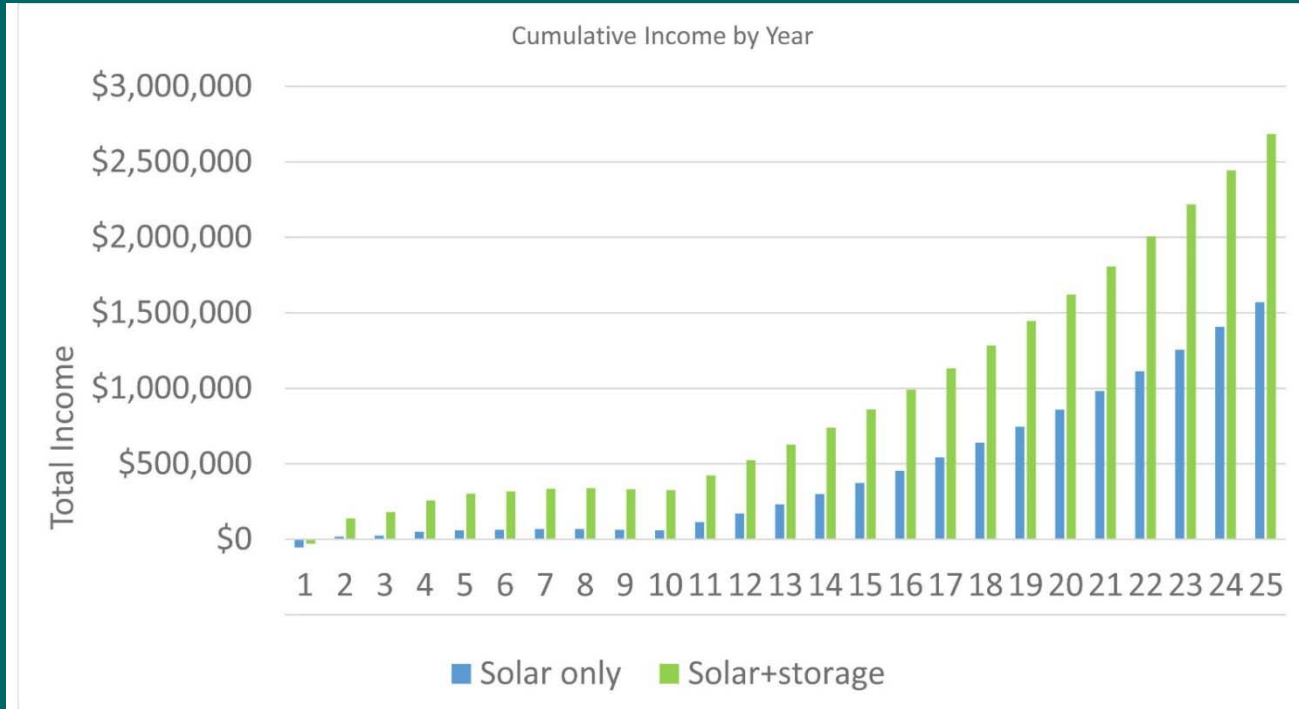
### Annual Energy Charges

|                              | A-6 TOU      | E-19R TOU    | A-1 TOU     | A-10 TOU    |
|------------------------------|--------------|--------------|-------------|-------------|
| Cost                         | \$87,795.36  | \$46,947.54  | \$80,332.76 | \$51,690.94 |
| Cost Est. with Solar         | -\$17,131.62 | -\$12,129.44 | -\$2,621.09 | -\$3,796.54 |
| Cost Est. with Solar+Storage | -\$29,445.84 | -\$20,098.28 | -\$4,076.81 | -\$6,231.51 |



200kw system generating 362Mwh per year  
Plus 360kwh storage

# Cumulative Income Commercial

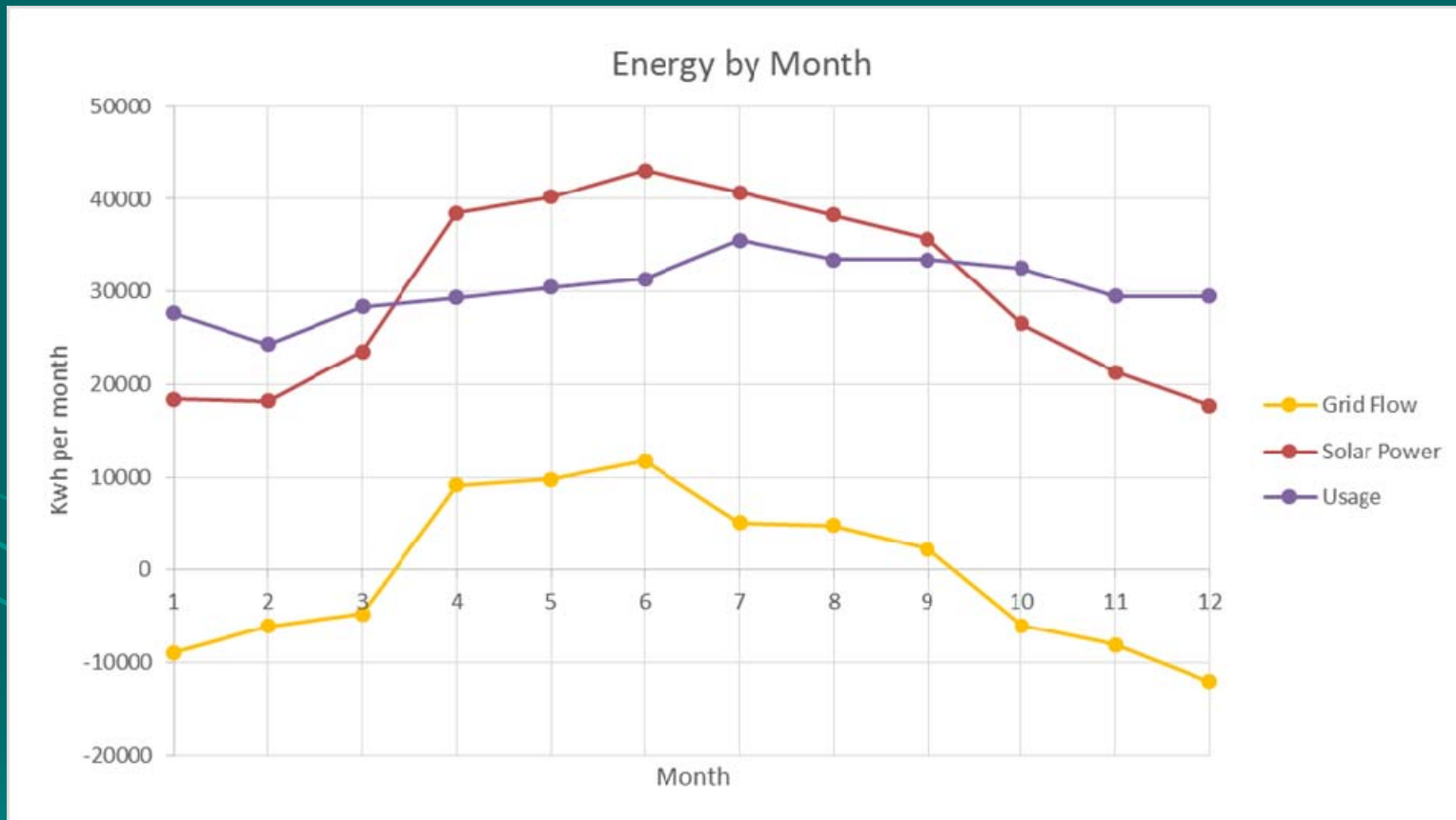


|                               | Solar only | Solar+storage |                 | Solar only | Solar+storage |
|-------------------------------|------------|---------------|-----------------|------------|---------------|
| Total Cost                    | \$400,000  | \$757,000     | Payments 1st yr | (\$53,290) | (\$100,851)   |
| Energy Annual Income 1st year | \$87,795   | \$117,240     | Income 1st yr   | \$87,795   | \$117,240     |
|                               |            |               | Payments 25 yr  | \$0        | \$0           |
| Battery rebate                | \$0        | \$99,180      | Income 25 yr    | \$251,054  | \$335,253     |
| Tax credits                   | \$120,000  | \$227,100     | Term            | 10         | 10 years      |
| Depreciation credits          | \$140,000  | \$264,950     | Rate            | 6.00%      | 6.00%         |
| Interest                      | \$143,472  | \$271,520     | Bank fees       | 0.00%      | 0.00%         |

200kw PV/360kwh storage, 10 year finance with California SGIP rebate

# Annual Production

Energy from solar most available in summer months, can be used to power AC and cooling systems, reduce peak demand



Example: 200kw PV / 360kwh storage

# Warranties

- Energport®'s commercial storage system provides a 10 year warranty, extendable to 20 years on commercial systems
- Energyport®'s residential AES comes with 5 year warranty, extendable to 10 years
- PV system manufacturers - 25 year warranty at 90% power level
- PV inverters can have 5 year warranty extendable to 10 years, or come with a standard 10 year warranty

# Financing Options

- PACE funding, other options in other states
- Third Party finance – typical terms vary based on project, generally 10-15 years
- Potential government assistance/grants
- Lease/purchase or Power Purchase Agreement from third party
- 30% Federal ITC, MACRS depreciation
- California – SGIP battery storage rebates

# PACE Funding

- Multiple provider options, not based on credit score, must own building
- PACE Finance options from 5 to 30 years
- Payments on property taxes – a portion is tax deductible
- If sell property, payments/assets may be transferable to new owners
- \$0 down
- No prepayment penalty

# Benefits of Solar Plus Storage

- Once system is paid off, generates positive cash flow for years
- Energy security in emergencies or unexpected grid failure
- Builds resilience into your community
- Key – schools, clinics, hospitals, shelters, food banks. police and fire stations
- California – SGIP rebates
- Reduces energy cost

# Benefits of Solar Plus Storage Continued

- Powering loads during peak rate demand periods adds value
- Reduces peak demand charges
- EV charging and Green Branding attract customers
- Potential to sell excess power, other grid benefits
- Add resilience to your community
- Green branding a plus



# Thank you!

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